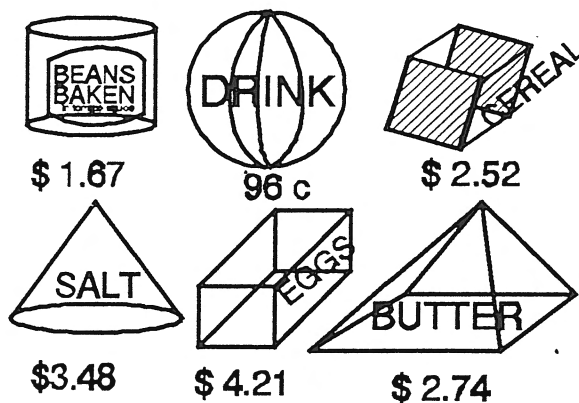


CHAPTER 1. BUYING.

SET 1. (a) Match these food containers with the given shapes.

SHAPE	FOOD
Prism	
Cylinder	
Cube	
Cone	
Sphere	
Pyramid	



(b) The foods displayed above are available in the PLENTY FOOD BAR. Complete the following bills for Mrs. Deer, one of the owners. Also calculate the correct change from the given note

3 Tins Beans		6 Drinks		8 Eggs	
2 Boxes Eggs		4 Butter		9 Salt	
4 Pkts Salt		5 Beans		7 Cereal	
1 Pkt Cereal		7 Salt		8 Drinks	
TOTAL		TOTAL		TOTAL	
NOTE	\$ 100	NOTE	\$ 50	NOTE	\$ 100
CHANGE		CHANGE		CHANGE	
9 Tins Beans		9 Cereal		3 Eggs	
7 Bts Drinks		8 Butter		2 Butter	
6 Pkts Salt		4 Salts		2 Cereal	
3 Bxs Cereal		7 Eggs		2 Drinks	
TOTAL		TOTAL		TOTAL	
NOTE	\$ 80	NOTE	\$ 100	NOTE	\$ 40
CHANGE		CHANGE		CHANGE	
1 Pkt Butter		7 Drinks		9 Eggs	
7 Boxes Eggs		5 Cereal		4 Salt	
4 Bts Drinks		6 Salt		8 Beans	
8 Pkt Cereal		7 Butter		3 Drinks	
TOTAL		TOTAL		TOTAL	
NOTE	\$ 60	NOTE	\$ 100	NOTE	\$ 80
CHANGE		CHANGE		CHANGE	
7 Tins Beans		7 Cereal		3 Eggs	
5 Bts Drinks		5 Butter		5 Salt	
4 Pkts Salt		3 Salts		6 Beans	
9 Bxs Cereal		5 Eggs		8 Drinks	
TOTAL		TOTAL		TOTAL	
NOTE	\$ 100	NOTE	\$ 70	NOTE	\$ 50
CHANGE		CHANGE		CHANGE	

SET 2. Complete the Division Table (correct to 1 dec. place).

/	2893	5783	3429	1233	4097	7819	4533
9							

SET 3. Mr. Deer upsets Mrs. Deer by losing all the price tags in the Fruit Bar. Help Mrs. Deer sort out the price of a single item by studying the old dockets in the rubbish bin.

5 Apples cost 65c	1 Apple =	6A = 48	A =
6 Pears cost \$1.62	1 Pear =	8B = 40	B =
7 Oranges cost 98c	1 Orange =	6O = 42	O =
8 Plums cost \$2.72	1 Plum =	9P = 27	P =
9 Onions cost \$1.17	1 Onion =	7O = 49	O =
6 Carrots cost \$2.52	1 Carrot =	6C = 54	C =
7 Peaches cost \$2.59	1 Peach =	5P = 45	P =
8 Lemons cost \$3.68	1 Lemon =	3L = 60	L =
9 Lettuces cost \$11.43	1 Lettuce =	6L = 300	L =
20 Potatoes cost \$ 1.20	1 Potato =	7P = 350	P =
30 Eggs cost \$ 12.60	1 Egg =	8E = 168	E =
40 Grapes cost \$ 3.20	1 Grape =	9G = 216	G =
50 Nuts cost \$ 7.00	1 Nut =	8N = 508	N =

SET 4. Mr. Deer has done it again. He has ripped the docket book into pieces. Rescue Mr. Deer again by completing the missing items in the following bills.

$12 + [] = 20$	$[] =$
$45 + [] = 86$	$[] =$
$17 + [] = 42$	$[] =$
$23 + [] = 50$	$[] =$
$74 + [] = 98$	$[] =$
$[] + 34 = 80$	$[] =$
$[] + 62 = 75$	$[] =$
$[] + 56 = 93$	$[] =$
$[] + 72 = 81$	$[] =$
$[] + 26 = 75$	$[] =$
$X + 11 = 20$	$X =$
$X + 23 = 30$	$X =$
$Y + 8 = 56$	$Y =$
$Y + 33 = 41$	$Y =$
$Z + 17 = 26$	$Z =$

$10 - @ = 4$	$@ =$
$60 - @ = 58$	$@ =$
$34 - @ = 23$	$@ =$
$56 - @ = 32$	$@ =$
$71 - @ = 55$	$@ =$
$@ - 17 = 35$	$@ =$
$@ - 56 = 9$	$@ =$
$@ - 27 = 21$	$@ =$
$@ - 54 = 63$	$@ =$
$@ - 14 = 77$	$@ =$
$A - 8 = 16$	$A =$
$20 - A = 13$	$A =$
$B - 11 = 35$	$B =$
$24 - C = 17$	$C =$
$D - 23 = 58$	$D =$

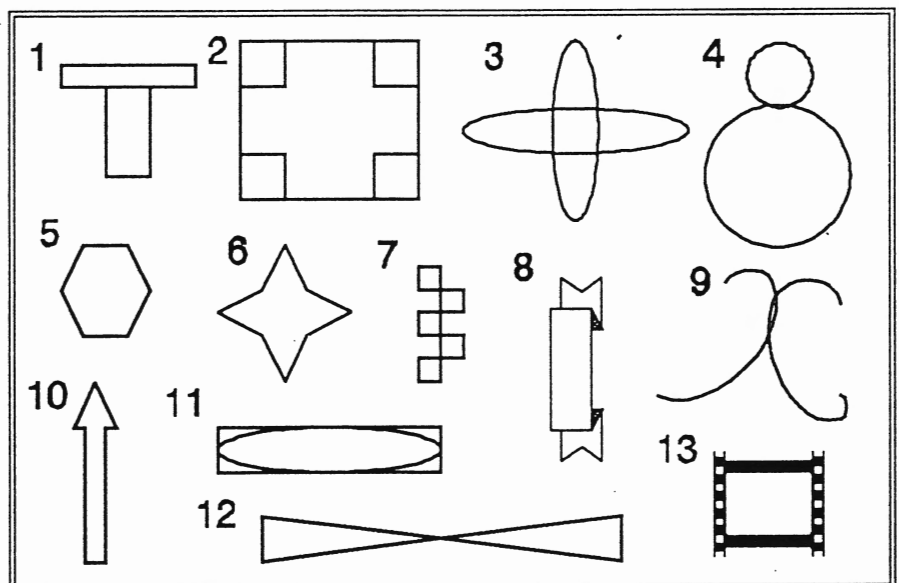
SET 5. A monkey has entered the PLENTY FOOD BAR and the monkey has pulled all the papers from the till and also written on many of them. Jim Deer and his wife can not understand the spoilt accounts. Can you work out these strange accounts?

$X + 11 = 20$	$X =$	$Y - 11 = 30$	$Y =$	$2X = 10$	$X =$
$7 + A = 18$	$A =$	$20 - B = 13$	$B =$	$C/2 = 4$	$C =$
$13 + C = 34$	$C =$	$15 - D = 5$	$D =$	$E/3 = 5$	$E =$
$P + 24 = 40$	$P =$	$Q - 13 = 24$	$Q =$	$4R = 16$	$R =$
$10 + S = 28$	$S =$	$T - 27 = 10$	$T =$	$W/5 = 6$	$W =$
$X + 23 = 34$	$X =$	$Y - 25 = 28$	$Y =$	$4X = 24$	$X =$
$X + 11 = 30$	$X =$	$Y - 19 = 44$	$Y =$	$5X = 30$	$X =$
$9 + A = 25$	$A =$	$33 - B = 13$	$B =$	$C/2 = 23$	$C =$
$51 + C = 60$	$C =$	$32 - D = 8$	$D =$	$E/6 = 7$	$E =$
$P + 32 = 57$	$P =$	$Q - 24 = 24$	$Q =$	$7R = 28$	$R =$
$38 + S = 63$	$S =$	$T - 22 = 17$	$T =$	$W/8 = 6$	$W =$
$29 + F = 25$	$F =$	$21 - B = 16$	$B =$	$C/8 = 40$	$C =$
$32 + C = 35$	$C =$	$32 - D = 11$	$D =$	$E/9 = 4$	$E =$
$P + 28 = 31$	$P =$	$Q - 42 = 30$	$Q =$	$7R = 16$	$R =$
$54 + S = 63$	$S =$	$T - 17 = 32$	$T =$	$W/9 = 11$	$W =$

SET 6. Jim Deer examines some labels on the tins in the PLENTY FOOD BAR. He has sketched some labels. (a) Draw in the axis or axes of symmetry.

(b) Reproduce five of these logos on cardboard. In the process, triple the size of each label.

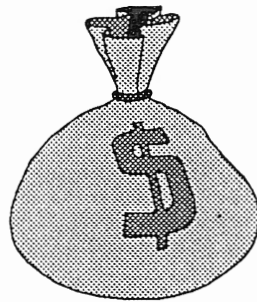
(c) Draw in the spaces your own labels using your instruments with given number of axes.



1 axis	2 axes	3 axes
--------	--------	--------

SET 7. Doris Deer is trying to teach her husband how to read a calculator with very little luck.

Jim claims that each time he performs a calculation, the answer is a WORD and not a NUMBER. Doris points out to Jim that he has the calculator UPSIDE down. Is Jim Correct? Key in the following calculations and write down the answer. Turn the calculator upside down and write down the word if it exists.



No	Calculation	Answer	Word
1	$11806.2 \div 12.6$		
2	$3439.98 - 235.98$		
3	$853.72 + 1354.28$		
4	36.32×25		
5	$69642 \div 9$		
6	$8665 - 7894$		
7	18.36×50		
8	$8964 \div 9 \div 3$		
9	$360.76 - 158.76$		
10	$90.11 + 247.89$		
11	111.85×20		
12	$5997.09 \div 1.87$		
13	11087.2×2.5		
14	$457.89 + 350.11$		
15	$54645.32 \div 24.76$		

SET 8. Find the square of these numbers.

Number	Square
8	
11	
17	
20	
24	
32	
37	
44	
49	
51	
53	
62	
70	

SET 9. Now Jim knows which buttons to press, he must learn how to "read" the calculator. Key in the following calculations and write down the result (a) correct to the nearest dollar and (b) correct to the nearest cent.

No.	Calculation	Result to nearest dollar	Result to nearest 10 cent
1	$\$ 45.67 \times 34$		
2	$\$ 5678 \div 66$		
3	$\$ 45.78 + \$ 5679.80$		
4	$\$ 756.80 - \$ 456.71$		
5	$\$ 167.32 \times 56$		

No.	Calculation	Result to nearest dollar	Result to nearest 10 cent
6	\$ 47658 / 38		
7	\$ 1354 - \$ 345.67		
8	\$ 2367.84 + \$ 564		
9	\$ 2345.11 x 69		
10	\$ 43567 / 23		
11	\$ 6789.70 x 5.2		
12	\$ 4578 / 24		
13	\$ 45572 + \$ 5339.86		
14	\$ 87986 - \$ 489.89		
15	\$ 345.48 x 0.24		
16	\$ 567.89 / 85		
17	\$ 8090 - \$ 545.23		
18	\$ 6787.80 + \$ 78.93		
19	\$ 7899.13 x 4.7		
20	\$ 678922 / 49		

SET 9. The PLENTY FOOD BAR allows its clients to operate accounts. Calculate the final balance of the following accounts and decide whether the buyer owes money or has a credit.

Amount \$	Paid \$	Balance left	Credit Debit
89.60	45.50		
76.46	34.18		
98.64	119.32		
86.74	73.55		
93.88	146.72		
78.95	64.89		
88.34	89.57		
69.45	86.39		
84.53	70.08		
95.46	123.64		
78.06	83.24		

Amount \$	Paid \$	Balance left	Credit Debit
345.78	209.56		
786.92	816.48		
754.90	890.22		
342.61	402.72		
478.22	645.72		
640.08	448.85		
123.89	109.96		
765.77	956.81		
665.42	303.33		
987.56	294.99		
234.62	487.47		

SET 10. Calculate the total in the till of the PLENTY FOOD BAR for each of the following days.

Day	No.10c	SUB	No.20c	SUB	No.50c	SUB	Total
1	32		45		23		
2	22		56		82		
3	65		37		19		
4	71		68		45		
5	75		92		71		
6	81		83		65		
7	73		24		88		
8	84		73		94		
9	63		82		77		
10	58		12		74		
11	76		83		95		
12	66		79		20		
13	82		87		81		
14	74		52		57		
15	25		50		75		

SET 11. A shop, called ALBARGAINS, decides to have a MYSTERY SALE. The manager coded all the prices and only tags the items with the codes. Find the prices of the following coded items and write the price over the tag.

KEY	a = \$16	b = \$8	c = \$4	d = \$2	e = \$10
------------	-----------------	----------------	----------------	----------------	-----------------

a+b

ab

a+b+c

$\frac{a}{c}$

bcd

$\frac{a}{d}$

a-c

b+c+d

b²

acd

cde

e-b

a²

ca

e-c

e+a-c

ce

a+c+e

3ad

5be

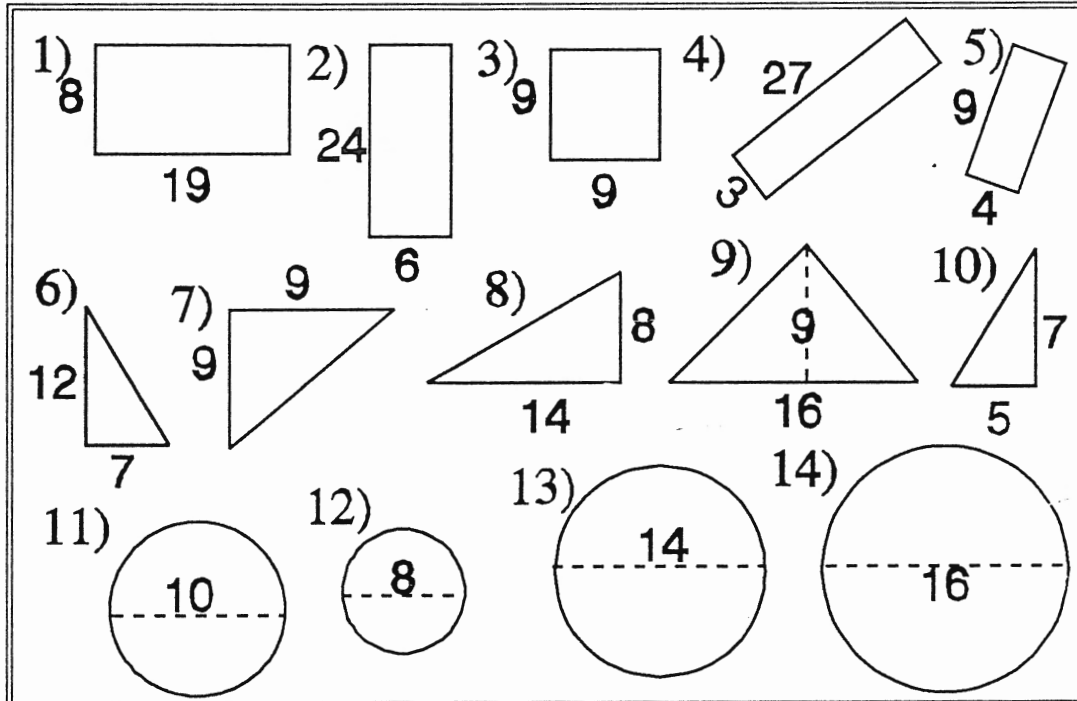
SET 12. The XMART shop sells its items on terms. Find the complete price for the following items.

Item	Payment per week	Time	No. of weeks	Total payments	Deposit	Full Price
Video	\$ 34.46	6 mths			\$ 85	
Table	\$ 38.19	6 mths			\$ 95	
Castle	\$ 13.93	3 mths			\$ 48	
Chair	\$ 75.75	3 mths			\$ 23	
Heater	\$ 64.27	1 yr			\$ 435	
Computer	\$ 117.68	1 yr			\$ 516	
Oven	\$ 49.04	6 mths			\$ 287	
Micro	\$ 62.83	3 mths			\$ 82	
Bed	\$ 83.08	1 yr			\$ 435	
Rocker	\$ 90.44	6 mths			\$ 247	
Buffet	\$ 52.85	3 mths			\$ 128	
Frig	\$ 68.19	1 yr			\$ 783	
Printer	\$ 73.07	2 yrs			\$ 894	
Bike	\$ 46.56	2 yrs			\$ 918	
TV	\$ 34.58	3 yrs			\$ 356	
Radio	\$ 36.92	4 yrs			\$ 708	

SET 13. By inverting your calculator, determine the secret codes revealed by the following calculations which were written on the table in the SWEET CAFE.

No.	Calculation	Answer	Code
1	$1234567 + 3456788 + 626352$		
2	$5.44 + 68171 - 14669.1$		
3	$1638 \times 1.5 \times 2$		
4	$1018 - 212.5 + 3.418$		
5	10609×5		
6	$81910 - 54178$		
7	$3867 / 5000$		
8	$33 \times 181 + 20$		
9	$10 + 322 \times 24$		
10	$66576 / 19$		

SET 14. Mr. Deer of the PLENTY FOOD BAR created and filled his own drink containers. For the following containers, calculate (a) the Area of the base, (b) the Volume of the container and (c) its capacity in litres. (Measurements in cm.)



N. B.

$\text{Area}_{\text{rectangle}} = \text{length} \times \text{breadth}$

$\text{Area}_{\text{triangle}} = \frac{1}{2} \text{ length} \times \text{height}$

$\text{Area}_{\text{circle}} = \pi \times r \times r$

$\text{Volume} = \text{Area base} \times \text{height}$

No.	Shape of Base	Dimension of Base	Area of Base	Height	Volume in ml	Capacity in litres
1		l= b=		20 cm		
2		l= b=		8 cm		
3		l= b=		11 cm		
4		l= b=		7 cm		
5		l= b=		4 cm		
6		l= h=		30 cm		
7		l= h=		9 cm		
8		l= h=		5 cm		
9		l= h=		40 cm		
10		l= h=		6 cm		
11		rad =		7 cm		
12		rad =		10 cm		
13		rad =		5 cm		
14		rad =		8 cm		

SET 15. Consider the following items from the HEALTH FOOD shop. Find the total number of ml and convert each answer to litres.

Flow Soup 415 ml	Dish Wash 682 ml	Slim Milk 730 ml	Prune Juice 498 ml
Sparko 728 ml	ZZ Tonic 956 ml	Gum Nut 830 ml	Mince Tea 817 ml

(a) SINGLE ITEMS

ITEM 1	ITEM 2	ITEM 3	TOTAL ml	No. of litres
FS	DW	SM		
SM	PJ	Sp		
GN	ZZ	MT		
FS	Sp	DW		
DW	ZZ	SM		
SM	GN	PJ		
PJ	MT	Sp		
ZZ	PJ	FS		
SM	Sp	GN		
MT	ZZ	Sp		

(b) MULTIPLE ITEMS

ITEM	No.	TOTAL ml	No. of litres
FS	6		
SM	8		
Sp	30		
ZZ	40		
PJ	20		
MT	50		
GN	10		
DW	60		
FS	80		
GN	60		

SET 16. Mr. TIN, of the HEALTH FOOD BAR, fills his own special jars from large vats. How many jars can be filled from each Vat? Only count completely filled jars.

No.	Vat Size	Jar Size	Number of jars	No.	Vat Size	Jar Size	Number of jars
1	375 ml	50 ml		11	834 ml	48 ml	
2	500 ml	75 ml		12	926 ml	64 ml	
3	750 ml	90 ml		13	703 ml	39 ml	
4	1000 ml	50 ml		14	857 ml	82 ml	
5	680 ml	75 ml		15	881 ml	46 ml	

No.	Vat Size	Jar Size	Number of jars	No.	Vat Size	Jar Size	Number of jars
6	925 ml	90 ml		16	902 ml	52 ml	
7	616 ml	50 ml		17	766 ml	63 ml	
8	834 ml	75 ml		18	844 ml	44 ml	
9	928 ml	90 ml		19	937 ml	92 ml	
10	736 ml	45 ml		20	855 ml	66 ml	

SET 17. Calculate the cost of one item in each of the following rows. Write the answer to the nearest cent. Then decide, which is the best buy? CIRCLE the best price.

Item	XMART	One	FOOD BAR	One	HEALTH STOP	One
Milk	5l for \$15		6l for \$ 24		7 l for \$14	
Tea	6kg for \$23		7kg for \$27		8kg for \$30	
Coca	9kg for \$60		3kg for \$10		7kg for \$45	
Flour	8kg for \$11		6kg for \$9		5kg for \$8	
Corn	6kg for \$45		8kg for \$49		4kg for \$42	
Beans	9kg for \$8		12kg for \$9		14kg for \$9	
Sugar	4kg for \$6		6kg for \$10		9kg for \$15	
Peas	8kg for \$12		7kg for \$11		6kg for \$12	
Soap	3l for \$45		8l for \$65		4l for \$52	
Bread	2kg for \$3		3kg for \$4		5kg for \$5	
Plums	7kg for \$53		4kg for \$42		8kg for \$83	
Nuts	6kg for \$65		5kg for \$55		8kg for \$96	
Oats	6l for \$48		3l for \$23		9l for \$94	
Cereal	7kg for \$40		4kg for \$12		6kg for \$38	
Juice	9l for \$5		4l for \$2		8l for \$3	

SET 18. Complete the following tables.

x	13	16	21	28	14	17
4						
6						
8						
7						
5						

-	657	853	735	632
145				
206				
318				
227				
498				

SET 19. Find the cost of a single item in the HEALTH FOOD BAR and then the cost of the given number of that item.

Item	Sale Price	Price per item	Given number	Total cost
Cheese	12kg for \$ 5.40		15	
Yogurt	18kg for \$22.14		12	
Onions	20kg for \$ 4.60		36	
Prunes	14kg for \$ 7.84		26	
Lemons	13kg for \$18.98		19	
Dates	23kg for \$40.94		42	
Grapes	16kg for \$43.68		51	
Cream	14l for \$32.62		44	
Shake	22l for \$56.76		23	
Juice	25l for \$86.75		38	
Water	45l for \$16.20		26	
Rice	36l for \$32.04		50	

SET 20. Two partners, Jill and Joe, share a various number of shops. They divide the profit from each shop in the same ratio as their investments. Complete the following table to find their shares in each of the following businesses.

Shop	Investment ratio	Value	No. of parts	Value of a share	Jill's share	Joe's share
Lite	3 : 2	\$ 65				
Mows	1 : 2	\$ 135				
Guy	1 : 1	\$ 120				
Adams	2 : 5	\$ 322				
Zoo	5 : 3	\$ 416				
Bats	4 : 3	\$ 602				
Hows	6 : 5	\$ 121				
Cow	4 : 7	\$ 396				
Whos	3 : 7	\$ 450				
Beds	8 : 5	\$ 110.50				
Mans	4 : 1	\$ 785				
Knot	9 : 8	\$ 425				
Stoys	3 : 2	\$ 895				

SET 21. In the XMART new shop, a DISCOUNT is allowed on all items as part of the opening sale. Calculate the DISCOUNT (to the nearest \$) and the SALE price of the following items.

Item	Marked Price	Discount	True Discount	Sale Price
Video	\$ 1280	1/5		
Water Bed	\$ 1468	1/4		
Microwave	\$ 860	3/10		
Camera	\$ 715	1/5		
Bicycle	\$ 924	1/3		
Hi-Fi	\$ 875	1/5		
Computer	\$ 2175	2/5		
Motor Bike	\$ 1088	3/8		
Heater	\$ 935	2/5		
Table	\$ 816	3/8		
Trailer	\$ 785	2/5		

SET 22. Complete the following Cross Numbers.

(A)

1	2	3		4	5	
	6				7	8
9				10		
			11			
12	13		14		15	
	16	17			18	19
20				21		

Across

- 229 + 63
- 498 - 232
- 69 / 3
- 246 + 306
- 541 - 312
- 3 x 9
- 2 x 10 + 1
- 944 - 528
- 48 / 2
- 207 - 142
- 577 + 158
- 3 x 60 x 2

Down

- 497 + 428
- 385 - 123
- 946 - 324
- 106 + 284
- 3 x 174
- 542 / 2
- 8 x 2 + 8
- 786 - 663
- 335 + 331
- 9 x 5
- 200 / 4

(B)

1	2		3	4		5
6		7		8	9	
		10	11			
	12		13	14		
15		16		17		18
		19				
	20				21	

Across

- 8 x 9
- 30 / 2
- 154 + 89
- 1368 - 720
- 8 squared
- 9 x 6
- 351 - 62
- 300 - 102
- 427 - 247
- 2 x (2+4)
- 6 x 4 + 6

Down

- 683 + 41
- 3 x 8
- 12 x 5 - 4
- 6 x 3
- 29 + 7
- 9 x 4
- 146 - 101
- 7 x 3 + 7
- 813 - 403
- 7 + 4 x 5
- 222 + 690
- 20 x 5 x 8